## Nuclide Analysis Results of Fish and Shellfish <Ocean Area Within 20km Radius of Fukushima Daiichi Nuclear Power Station> Samples collected in the third guarter of FY2017

[Measurement results of Sr-90 (half-life approx. 29 years) in fish]

Name of Sample (Region)				Radioactivity Concentration [Bq/kg(Raw)] (Half-life)	
		Place of Sampling (Place No.)	Date of Sampling	Sr-90 <sup>*1</sup> (Approx. 29 years)	Reference <sup>*1</sup> (Sum of Cs-134 and Cs-137)
Black seabream (whole)	*3	Around 1km Offshore of Ota River (T-S1)	December 8, 2017	0.15	ND
Japanese angel shark (whole)	*3	Around 3km Offshore of Odaka Ward (T-S2)	December 8, 2018	0.11	258
Black seabream ① (whole)	*2	Around 2km Offshore of Kido River (T-S5)	December 5, 2019	0.15	ND
Black seabream ② (whole)	*2	Around 2km Offshore of Kido River (T-S5)	December 5, 2020	0.034	ND
Black seabream (whole)	*2	Around 2km Offshore of Fukushima Daini (T-S7)	December 5, 2021	0.087	ND

\*1 Cs: Edible parts of fish were used for the measurement. Sr: Whole of fish were used for the measurement.

The sum of Cs-134 and Cs-137 radioactivity concentrations as a standard value (since April 1, 2012) is 100Bq per kg.

\*The Sr-90 analysis was conducted by <sup>\*2</sup>KANSO CO., LTD. and by <sup>\*3</sup>Kyushu Environmental Evaluation Association.

## Nuclide Analysis Results of Fish and Shellfish <Ocean Area Within 20km Radius of Fukushima Daiichi Nuclear Power Station> Samples collected in the third guarter of FY2017

## [Measurement results of Tritium (half-life approx. 12 years) in fish] Place of Sampling(Place No.): Around 4km Offshore of Kumagawa (T-S8)

Name of Sample (Region)	Date of Sampling	Tritium concentration (Bq/L)		Tritium concentration (Bq/kg (Raw))		Reference (Sum of Cs-134
		Free Water Tritium	Organically Bound Tritium	Free Water Tritium	Organically Bound Tritium	and Cs-137) (Bq/kg (Raw))
Flatfish① (muscle)	October 12, 2017	0.090	ND(0.27)	0.072	ND(0.034)	ND
Flatfish (muscle)	November 2, 2017	0.088	ND(0.28)	0.071	ND(0.035)	ND
Flatfish② (muscle)	December 21, 2017	0.076	ND(0.27)	0.061	ND(0.033)	5.2

## Reference

	Date of Sampling	Tritium concentration (Bq/L)	
Around 4km Offshore	October 11, 2017	0.079	
of Kumagawa (T-S8)	November 1, 2017	0.083	
Seawater	December 21, 2017	0.073	

\*The sum of Cs-134 and Cs-137 radioactivity concentrations as a standard value (since April 1, 2012) is 100Bq per kg.

\*The tritium analysis was conducted by Kyushu Environmental Evaluation Association.

\*Edible parts of fish were used for the measurement.

\*Free Water Tritium means tritium which is contained in the moisture of fish muscles and the values are compared with tritium concentrations in seawater where fish lives.

Organically Bound Tritium means tritium which is contained in dried fish muscles and the values show tritium concentrations in the vapor generated when dried fish is burned.

\*The measurement results are calculated to two significant figures.

\*ND, not detected, indicates that a value is less than the detection limit of a radioactive concentration. The detection limit is provided in parenthesis.